AMENDMENTS TO THE CLAIMS

1. – 12. (Canceled)

13. (Currently Amended) A method for producing a purine nucleoside by fermentation comprising:

culturing a microorganism in a culture medium to produce and accumulate the purine nucleoside in the medium, and

collecting the purine nucleoside,

wherein the microorganism belongs to the genus *Escherichia* and is modified to block a reaction catalyzed by phosphoglucose isomerase ~~branching from purine nucleoside biosynthesis and leading to another metabolite~~ in said microorganism,

wherein said microorganism produces an amount of purine nucleoside that is greater than the amount produced by the corresponding wild type microorganism~~, and~~

~~wherein said reaction is catalyzed by an enzyme selected from the group consisting of succinyl-adenosine monophosphate synthase, purine nucleoside phosphorylase, adenosine deaminase, inosine-guanosine kinase, guanosine monophosphate reductase, 6-phosphogluconoate deydrase, phosphoglucose isomerase, adenine deaminase, and xanthosine phosphorylase~~.

14. (Currently Amended) The method according to claim 13, wherein said microorganism is further modified to increase ~~further comprising increasing~~ expression of a gene encoding an enzyme involved in purine nucleoside biosynthesis in said microorganism, wherein said enzyme involved in purine nucleoside biosynthesis is a phosphoribosyl pyrophosphate amidotransferase or a phosphoribosyl pyrophosphate synthetase.

15. (Currently Amended) The method according to claim 13, wherein said microorganism is further modified to deregulate ~~further comprising deregulating~~ control of an

enzyme involved in purine nucleoside biosynthesis in said microorganism, wherein said enzyme involved in purine nucleoside biosynthesis is a phosphoribosyl pyrophosphate amidotransferase or a phosphoribosyl pyrophosphate synthetase.

16. (Currently Amended) The method according to claim 15, wherein the enzyme involved in the purine nucleoside biosynthesis is phosphoribosyl pyrophosphate amidotransferase and wherein control of said enzyme involved in the purine nucleoside biosynthesis is desensitized by desensitization of feedback inhibition arising from replacing at least one of the lysine residue ~~corresponding to~~ at position 326 of the Escherichia *purF* gene product with a glutamine residue or the proline residue ~~corresponding to~~ at position 410 of the Escherichia *purF* gene product with a tryptophan residue, said phosphoribosyl pyrophosphate amidotransferase being encoded by a gene obtainable by PCR amplification employing the primer pair of SEQ ID NO: 1 and SEQ ID NO: 2.

17. (Previously Presented) The method according to claim 14, wherein the enzyme involved in the purine nucleoside biosynthesis is phosphoribosyl pyrophosphate amidotransferase.

18. (Previously Presented) The method according to claim 15, wherein the enzyme involved in the purine nucleoside biosynthesis is phosphoribosyl pyrophosphate amidotransferase.

19. (Canceled)

20. (Previously Presented) The method according to claim 14, wherein the enzyme involved in the purine nucleoside biosynthesis is phosphoribosyl pyrophosphate synthetase.

21. (Previously Presented) The method according to claim 15, wherein the enzyme involved in the purine nucleoside biosynthesis is phosphoribosyl pyrophosphate synthetase.

22. (Previously Presented) The method according to claim 15, wherein control of said enzyme involved in the purine nucleoside biosynthesis is derepressed by inactivation of a purine repressor encoded by the *purR* gene from *Escherichia coli*.

23. – 24. (Canceled)

25. (Currently Amended) The method according to claim 13, wherein said microorganism is further modified to inhibit ~~further comprising inhibiting~~ incorporation of a purine nucleoside into said microorganism by blockage of a reaction catalyzed by nucleoside permease.

26. – 27. (Canceled)

28. (Currently Amended) The method of ~~Claim 27~~ claim 13, wherein said phosphoglucose isomerase is encoded by a gene obtainable by PCR amplification employing the primer pair of SEQ ID NO: 22 and SEQ ID NO: 23.

29. (New) The method of claim 13, wherein said microorganism is further modified to block a reaction catalyzed by an enzyme selected from the group consisting of succinyl-adenosine monophosphate synthase, purine nucleoside phosphorylase, adenosine deaminase, inosine-guanosine kinase, guanosine monophosphate reductase, 6-phosphogluconoate deydrase, adenine deaminase, and xanthosine phosphorylase, in said microorganism.

30. (New) The method of claim 13, wherein said purine nucleoside is a purine nucleoside selected from the group consisting of inosine and guanosine.

SUPPORT FOR THE AMENDMENTS

Claims 19, 23, 24, and 26 were previously canceled.

Claims 1-12 and 27 are canceled herein.

Claims 13-16, 25, and 28 have been amended.

Claims 29-30 have been added.

The amendment of Claims 13-16, 25, and 28 is supported the claim as previously presented and throughout the specification as filed. The amendment of Claim 16 are supported by previously pending Claim 19 and the specification as filed, for example at page 22, line 11 to page 28, line 3 (Example 1). New Claims 29-30 are supported by the original claims and the specification as filed.

No new matter is believed to have been entered by these amendments.